

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1-142 (cancelled)

1           143. (Currently Amended) A functional engineered fluorescent protein whose  
2 amino acid sequence is substantially identical to the amino acid sequence of *Aequorea* green  
3 fluorescent protein (SEQ ID NO:2) and which differs from SEQ ID NO:2 by

4           i) comprising substitutions at T203Y; S65G; S72A; V68L; and H148Q or  
5 H148G at least one first substitution at position T203, wherein the substitution  
6 selected from the group consisting H, Y, W or F, and

7           ii) comprising at least one substitution selected from the group consisting of  
8 Y66H, F, or W; Q69N or K; R96K; Q183N or K; and the substitutions listed in  
9 Table F at least one second substitution of position H148, wherein said functional  
10 engineered fluorescent protein has a different fluorescent property and improved  
11 anion binding as compared to than *Aequorea* green fluorescent protein.

1           144. (original) The functional engineered fluorescent protein of claim 143,  
2 wherein said at least one second substitution at position H148 is selected from the group  
3 consisting of H148R, H148G, H148Q, H148A, H148N, and H148K.

1           145. (original) The functional engineered fluorescent protein of claim 144,  
2 wherein said at least one second substitution at position H148 is H148Q.

1           146. (original) The functional engineered fluorescent protein of claim 144,  
2 wherein said at least one second substitution at position H148 is H148G.

1           147. (cancelled)

1                   148. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 143, wherein said functional engineered fluorescent protein ~~further~~ comprises a ~~at least one~~  
3 ~~third~~ substitution at position V150.

1                   149. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 148, wherein said ~~at least one third~~ substitution at position V150 is selected from the group  
3 consisting of Q, S, T and N.

1                   150. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 143, wherein said functional engineered fluorescent protein ~~further~~ comprises a ~~at least one~~  
3 ~~third~~ substitution at position V163.

1                   151. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 150, wherein said ~~at least one third~~ substitution at position V163 is selected from the group  
3 consisting of Q, S, T and N.

1                   152. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 143, wherein said functional engineered fluorescent protein ~~further~~ comprises a ~~at least one~~  
3 ~~third~~ substitution at position Q69.

1                   153. (Currently Amended) The functional engineered fluorescent protein of  
2 claim 152, wherein said ~~at least one third~~ substitution at position Q69 is selected from the group  
3 consisting of N, ~~S, T and V~~ and K.

1                   154-187 (cancelled).